

## 201.1 - pH Calibration (powder form)

These SRMs are used to prepare solutions of known hydrogen ion activity to calibrate commercial pH instruments. SRMs 186g and 191d are each certified for use as an admixture only. SRM 186g (186-I-g and 186-II-g) may be used to prepare solutions with a pH of 6.8640 at 25°C, or physiological buffer solutions with a pH of 7.4157 at 25°C.

PLEASE NOTE: The tables are presented to facilitate comparisons among a family of materials to help customers select the best SRM for their needs. For specific values and uncertainties, the certificate is the only official source.

| SRM                   | 185i                                      | 186g   | 187f   | 188                                       | 189c  | 191d   | 2193b  |
|-----------------------|---|--|--|---|---|--|--|
| Description           | Potassium Hydrogen Phthalate, pH Standard | pH Standards Potassium Dihydrogen Phosphate (186-I-g) Disodium Hydrogen Phosphate (186-II-g) | Sodium Tetraborate Decahydrate (Borax) pH Standard | Potassium Hydrogen Tartrate (pH Standard) | Potassium Tetroxalate Dihydrate pH Standard | Sodium Bicarbonate (191d-I) Sodium Carbonate (191d-II) (pH Standard) | Calcium Carbonate pH Standard (used as saturated calcium hydroxide solution) (pH Standard) |
| Unit Size             | (60 g)                                    | (set)  | (30 g)   | (60 g)                                    | (65 g)                                      | (1 bottle x25g;1bottlex30g)  | (30 g)   |
| pH(S) Values at 25 °C | 4.005                                     | (see text above)   | 9.195  | 3.557                                     | 1.677                                       | 10.014   | 12.453   |

- Certified values are normal font
- Reference values are italicized
- Values in parentheses are for information only